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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III - 6th & Walnut Sts.
Philadelphia, Pa. 19106

SUBJECT: "How Clean is Clean" - PCB's

DATE: APR 14 1983

FROM: Larry S. Miller, Chief *Miller*
Toxic, Pesticides & Water Monitoring Section

TO: Robert J. Mitkus, Director
Environmental Services Division

THRU: Robert Kramer, Acting Chief
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Over the last several weeks it is becoming apparent that we need an overall regional policy on "how clean is clean" with respect to PCB clean ups and related enforcement actions. Headquarters has not adequately addressed the issue and does not anticipate resolving it in the near future. The attached memo was written on this subject, but it relates to a specific case. I feel we must have a regional policy and it must be conservative, place strong emphasis on cleaning up our environment and allow a margin of safety where health assessment data is skimpy or minimal. The latter consideration is especially important when the compounds we are dealing with are as persistent and toxic as PCB's.

My policy is essentially to clean to preexisting background levels where there is a risk of exposure or threat of contamination to waters of this nation, to humans, to human food, to animal feed or to the environment. Background levels will be determined on a case by case basis generally after a representative number of grid samples have been collected and properly analyzed. An exception to this policy is where clean up to background levels would cause more harm or risk to humans or the environment. However, under most circumstances, clean up will always be required to levels less than 50 ppm.

This policy is consistent with the intent of the PCB regulations to rid our environment of PCBs and with the past practise of Region III legal and technical staffs. I recommend that all programs in this region be asked to carry out this policy where PCBs are involved in the clean up until such time as a court decision or overall HQ's policy is handed down for this Region's program personnel to follow.

AR200057

Finally, for your information on a related topic, we have just received a proposed policy on "Residual PCBs less than 50 ppm separated from higher concentration PCB material." Headquarter's proposed policy interprets Section 40 CFR 761.1 that states that a substance containing less than 50 ppm PCBs because of any dilution shall be treated for disposal purposes as though it contains greater than 50 ppm PCB concentrations. This will prevent dilution to avoid carrying out the disposal requirement of the regulations.

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PCB Spill Cleanup Policy - How Clean is Clean?

The policy in EPA Region III has historically been to require cleanup to background levels. On April 2, 1987, EPA published the TSCA PCB spill cleanup policy rule, which sets national standards for cleanup of PCB spills which occur after May 4, 1987.

The spill policy cleanup requirements differentiate between low concentration spills (containing less than 500 ppm PCB) which contain less than 1 pound of PCBs by weight vs. high concentration spills and, low concentration spills involving 1 pound or more PCBs by weight.

The major elements of the policy pertaining to high concentration spills and, low concentration spills involving 1 pound or more PCBs, include:

Immediate requirements (within 24 hrs)

1. Notification requirements as applicable;
2. Spill area secured and posted;
3. Area of visible contamination recorded and documented;
4. Initiate cleanup of all visible traces of fluid.

Decontamination requirements (Post-cleanup sampling is required) Outdoor electrical substations

- a. Solid surfaces are to be cleaned to 100 micrograms/100 cm².
- b. Soil is to be cleaned to 25 ppm. At the option of the responsible party, soil may be cleaned to 50 ppm provided a notification of the cleanup level is posted in the area.

Other restricted access areas

- a. High contact solid surfaces are to be cleaned to 10 micrograms/100 cm².
- b. Low contact, indoor solid surfaces will also be decontaminated to 10 micrograms/100 cm². At the option of the responsible party, low contact, indoor, nonimpervious surfaces may be decontaminated to 100 micrograms/100 cm² and encapsulated.
- c. Low contact, outdoor surfaces are to be cleaned to 100 micrograms/100 cm².
- d. Soil is to be cleaned to 25 ppm.

Nonrestricted access areas

- a. Replaceable items shall be properly disposed of.
- b. Indoor and outdoor solid surfaces are to be cleaned to 10 micrograms/100 cm².
- c. At the option of the responsible party, low-contact, outdoor nonimpervious solid surfaces are to be cleaned either to 10 micrograms/100 cm², or cleaned to 100 micrograms/100 cm² and encapsulated.
- d. Soil is to be cleaned to 10 ppm and excavated to at least 10 inches.

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Recordkeeping requirements

1. Maintained five years;
2. Identification of source of spill;
3. Date and time of spill;
4. Date and time cleanup completed;
5. Description of spill location and nature of materials contaminated;
6. Any precleanup sampling data used to establish the spill boundaries;
7. Description of surfaces cleaned;
8. Amount and depth of soil removed;
9. Postcleanup sampling data.

The major elements of the policy pertaining to low concentration spills involving < 1 lb. PCBs, or less than 270 gallons of untested mineral oil, include:

Immediate requirements (within 24 hrs)

1. Notification requirements as applicable.

Decontamination requirements

- a. All indoor, residential surfaces must be cleaned to 10 ug/100 cm².
- b. All other solid surfaces must be double washed/rinsed.
- c. All soil with visible traces of oil, plus a buffer of 1 lateral foot, must be excavated, and the ground must be restored to its original configuration with clean soil.
- d. All cleanup must be completed within 48 hours after the responsible party was notified or became aware of the spill.

Recordkeeping requirements

1. Maintained 5 years;
2. Identification of source of spill;
3. Date and time cleanup was completed or terminated;
4. Description of spill location;
5. Precleanup sampling data used to establish the spill boundaries;
6. Description of solid surfaces cleaned and of wash/rinse method used;
7. Amount and depth of soil excavation;
8. A certification statement signed by the responsible party stating that the cleanup requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

For further information, or a copy of the PCB spill policy, call the TSCA Assistance Office at (202) 554-1404, or the EPA Region III PCB Program at (215) 597-3659/4651.

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CONTAMINATION REQUIREMENTS FOR HIGH CONCENTRATION SPILLS, & LOW CONCENTRATION SPILLS INVOLVING > 1 LB. PCBs

TYPE OF CONTAMINATED ITEM

CLEANUP STANDARDS PER ACCESS AREA

TYPE OF CONTAMINATED ITEM	CLEANUP STANDARDS PER ACCESS AREA		
	Nonrestricted Access Areas	Restricted access areas, other than Electrical Substations	Outdoor Electrical Substations
Impervious Solid Surfaces (includes metals, glass, siding & laminated surfaces)	outdoor high contact low contact	10 ug/100 cm ² ----- 100 ug/100 cm ²	100 ug/100 cm ²
	indoor high contact low contact	10 ug/100 cm ²	
Nonimpervious Solid Surfaces (includes wood, concrete, asphalt & plasterboard)	outdoor high contact low contact	10 ug/100 cm ² ----- 100 ug/100 cm ²	100 ug/100 cm ²
	indoor high contact low contact	10 ug/100 cm ² ----- 10 ug/100 cm ² *	
Soil	10 ppm, minimum depth of 10" and site restored **	25 ppm	25 ppm or 50 ppm provided a notification of cleanup level is visibly posted
Replaceable Household Items	properly disposed of		

* Or cleaned, by 100 ug/100 cm² and encapsulated.

** Restored means to replace with clean soil, i.e. containing less than 1 ppm PCBs.

All spills involving 10 pounds or more of pure PCB material must be reported to the National Response Center (1-800-424-8802).

For guidance contact the appropriate EPA regional office (in PA, MD, DE, VA, WV, and DC call 215-597-4651/7668). All spills involving surface water, sewers, drinking water, grazing land, or vegetable gardens must be reported to the appropriate EPA regional office.

DECONTAMINATION REQUIREMENTS FOR LOW CONCENTRATION SPILLS INVOLVING < 1 LB. PCBS, OR LESS
THAN 270 GALLONS OF UNTESTED MINERAL OIL

AR20002

TYPE OF CONTAMINATED ITEM		CLEANUP STANDARD
* Solid Surfaces	Indoor residential	10 ug/100 cm ²
	other	double wash, rinse
* Soil	All soil with visible spill traces within the spill area plus a foot buffer is to be removed, and site restored. **	

* All cleanup must be completed within 48 hours after the responsible party was notified or became aware of the spill.

** Restored means to replace with clean soil, i.e. containing less than 1 ppm PCBs.